Exploring Aeronautics			
2005 Mathematics			
Core Curriculum			
New York Mathematics			
Grade 5			
Activity/Lesson	**State**	**Standards**	
Fundamentals of Aeronautics (145-176)	NY	MA.5.5.PS.7	Represent problem situations verbally, numerically, algebraically, and/or graphically
Fundamentals of Aeronautics (145-176)	NY	MA.5.5.CM.4	Share organized mathematical ideas through the manipulation of objects, numerical tables, drawings, pictures, charts, graphs, tables, diagrams, models, and symbols in written and verbal form
Fundamentals of Aeronautics (145-176)	NY	MA.5.5.R.1	Use physical objects, drawings, charts, tables, graphs, symbols, equations, or objects created using technology as representations
Fundamentals of Aeronautics (145-176)	NY	MA.5.5.M.6	Determine the tool and technique to measure with an appropriate level of precision: lengths and angles
Fundamentals of Aeronautics (145-176)	NY	MA.5.5.M.9	Determine personal references for customary units of length (e.g., your pace is approximately 3 feet, your height is approximately 5 feet, etc.)
Fundamentals of Aeronautics (145-176)	NY	MA.5.5.M.10	Determine personal references for metric units of length
Fundamentals of Aeronautics (145-176)	NY	MA.5.5.S.1	Collect and record data from a variety of sources (e.g., newspapers, magazines, polls, charts, and surveys)
Fundamentals of Aeronautics (145-176)	NY	MA.5.5.S.4	Formulate conclusions and make predictions from graphs
Airplane Control(209-256)	NY	MA.5.5.M.6	Determine the tool and technique to measure with an appropriate level of precision: lengths and angles
Airplane Control(209-256)	NY	MA.5.5.M.8	Measure and draw angles using a protractor
The Resource Center	NY	MA.5.5.PS.7	Represent problem situations verbally, numerically, algebraically, and/or graphically
The Resource Center	NY	MA.5.5.N.2	Compare and order numbers to millions
Science of Flight	NY	MA.5.5.CM.7	Raise questions that elicit, extend, or challenge others' thinking
Science of Flight	NY	MA.5.5.CN.5	Model situations with objects and representations and be able to draw conclusions
Science of Flight	NY	MA.5.5.S.1	Collect and record data from a variety of sources (e.g., newspapers, magazines, polls, charts, and surveys)
Science of Flight	NY	MA.5.5.S.4	Formulate conclusions and make predictions from graphs
Integrating with Aeronautics	NY	MA.5.5.PS.7	Represent problem situations verbally, numerically, algebraically, and/or graphically

Integrating with Aeronautics	NY	MA.5.5.PS.11	Translate from a picture/diagram to a number or symbolic expression
Integrating with Aeronautics	NY	MA.5.5.R.1	Use physical objects, drawings, charts, tables, graphs, symbols, equations, or objects created using technology as representations
Integrating with Aeronautics	NY	MA.5.5.M.6	Determine the tool and technique to measure with an appropriate level of precision: lengths and angles
Integrating with Aeronautics	NY	MA.5.5.S.4	Formulate conclusions and make predictions from graphs
Intro to Aeronautics (109-123)	NY	MA.5.5.S.1	Collect and record data from a variety of sources (e.g., newspapers, magazines, polls, charts, and surveys)
Intro to Aeronautics (109-123)	NY	MA.5.5.S.3	Calculate the mean for a given set of data and use to describe a set of data
Scientific Method(124-144)	NY	MA.5.5.CN.5	Model situations with objects and representations and be able to draw conclusions
Scientific Method(124-144)	NY	MA.5.5.R.8	Use mathematics to show and understand social phenomena (e.g., construct tables to organize data showing book sales)
Scientific Method(124-144)	NY	MA.5.5.S.1	Collect and record data from a variety of sources (e.g., newspapers, magazines, polls, charts, and surveys)
Exploring Aeronautics			
2005 Mathematics			
Core Curriculum			
New York Mathematics			
Grade 6			
Activity/Lesson	**State**	**Standards**	
Fundamentals of Aeronautics (145-176)	NY	MA.6.6.PS.7	Represent problem situations verbally, numerically, algebraically, and/or graphically
Fundamentals of Aeronautics (145-176)	NY	MA.6.6.PS.15	Make organized lists or charts to solve numerical problems
Fundamentals of Aeronautics (145-176)	NY	MA.6.6.R.1	Use physical objects, drawings, charts, tables, graphs, symbols, equations, or objects created using technology as representations
Science of Flight	NY	MA.6.6.CM.7	Raise questions that elicit, extend, or challenge others' thinking
Science of Flight	NY	MA.6.6.CN.5	Model situations with objects and representations and be able to draw conclusions
Integrating with Aeronautics	NY	MA.6.6.R.1	Use physical objects, drawings, charts, tables, graphs, symbols, equations, or objects created using technology as representations
Intro to Aeronautics (109-123)	NY	MA.6.6.S.1	Develop the concept of sampling when collecting data from a population and decide the best method to collect data for a particular question

Scientific Method(124-144)	NY	MA.6.6.CM.7	Raise questions that elicit, extend, or challenge others' thinking
Scientific Method(124-144)	NY	MA.6.6.CN.5	Model situations with objects and representations and be able to draw conclusions
Scientific Method(124-144)	NY	MA.6.6.S.7	Read and interpret graphs
Exploring Aeronautics			
2005 Mathematics			
Core Curriculum			
New York Mathematics			
Grade 7			
Activity/Lesson	**State**	**Standards**	
Fundamentals of Aeronautics (145-176)	NY	MA.7.7.PS.15	Choose methods for obtaining required information
Fundamentals of Aeronautics (145-176)	NY	MA.7.7.CM.4	Share organized mathematical ideas through the manipulation of objects, numerical tables, drawings, pictures, charts, graphs, tables, diagrams, models and symbols in written and verbal form
Fundamentals of Aeronautics (145-176)	NY	MA.7.7.R.1	Use physical objects, drawings, charts, tables, graphs, symbols, equations, or objects created using technology as representations
Wings(177-208)	NY	MA.7.7.M.11	Students will develop strategies for estimating measurements. Estimate surface area
Tools of Aeronautics(257-326)	NY	MA.7.7.R.9	Use mathematics to show and understand physical phenomena (e.g., make and interpret scale drawings of figures or scale models of objects)
The Tools of Aeronautics	NY	MA.7.7.R.9	Use mathematics to show and understand physical phenomena (e.g., make and interpret scale drawings of figures or scale models of objects)
The Resource Center	NY	MA.7.7.N.13	Add and subtract two integers (with and without the use of a number line)
Science of Flight	NY	MA.7.7.RP.3	Evaluate conjectures by distinguishing relevant from irrelevant information to reach a conclusion or make appropriate estimates
Science of Flight	NY	MA.7.7.CN.4	Model situations mathematically, using representations to draw conclusions and formulate new situations
Science of Flight	NY	MA.7.7.S.1	Identify and collect data using a variety of methods
Integrating with Aeronautics	NY	MA.7.7.RP.8	Apply inductive reasoning in making and supporting mathematical conjectures
Integrating with Aeronautics	NY	MA.7.7.CM.4	Share organized mathematical ideas through the manipulation of objects, numerical tables, drawings, pictures, charts, graphs, tables, diagrams, models and symbols in written and verbal form

Integrating with Aeronautics	NY	MA.7.7.R.1	Use physical objects, drawings, charts, tables, graphs, symbols, equations, or objects created using technology as representations
Integrating with Aeronautics	NY	MA.7.7.S.6	Read and interpret data represented graphically (pictograph, bar graph, histogram, line graph, double line/bar graphs or circle graph)
Intro to Aeronautics (109-123)	NY	MA.7.7.S.1	Identify and collect data using a variety of methods
Intro to Aeronautics (109-123)	NY	MA.7.7.S.6	Read and interpret data represented graphically (pictograph, bar graph, histogram, line graph, double line/bar graphs or circle graph)
Scientific Method(124-144)	NY	MA.7.7.PS.15	Choose methods for obtaining required information
Scientific Method(124-144)	NY	MA.7.7.RP.2	Use mathematical strategies to reach a conclusion
Scientific Method(124-144)	NY	MA.7.7.RP.3	Evaluate conjectures by distinguishing relevant from irrelevant information to reach a conclusion or make appropriate estimates
Scientific Method(124-144)	NY	MA.7.7.CN.4	Model situations mathematically, using representations to draw conclusions and formulate new situations
Scientific Method(124-144)	NY	MA.7.7.S.1	Identify and collect data using a variety of methods
Scientific Method(124-144)	NY	MA.7.7.S.6	Read and interpret data represented graphically (pictograph, bar graph, histogram, line graph, double line/bar graphs or circle graph)
Scientific Method(124-144)	NY	MA.7.7.S.11	Design and conduct an experiment to test predictions
Exploring Aeronautics			
2005 Mathematics			
Core Curriculum			
New York Mathematics			
Grade 8			
Activity/Lesson	**State**	**Standards**	
Fundamentals of Aeronautics (145-176)	NY	MA.8.8.CM.4	Share organized mathematical ideas through the manipulation of objects, numerical tables, drawings, pictures, charts, graphs, tables, diagrams, models and symbols in written and verbal form
Fundamentals of Aeronautics (145-176)	NY	MA.8.8.R.1	Use physical objects, drawings, charts, tables, graphs, symbols, equations, or objects created using technology as representations
The Tools of Aeronautics	NY	MA.8.8.R.9	Use mathematics to show and understand physical phenomena (e.g., make and interpret scale drawings of figures or scale models of objects)
Science of Flight	NY	MA.8.8.RP.2	Use mathematical strategies to reach a conclusion

Science of Flight	NY	MA.8.8.RP.3	Evaluate conjectures by distinguishing relevant from irrelevant information to reach a conclusion or make appropriate estimates
Science of Flight	NY	MA.8.8.R.9	Use mathematics to show and understand physical phenomena (e.g., make and interpret scale drawings of figures or scale models of objects)
Integrating with Aeronautics	NY	MA.8.8.RP.8	Apply inductive reasoning in making and supporting mathematical conjectures
Integrating with Aeronautics	NY	MA.8.8.CM.4	Share organized mathematical ideas through the manipulation of objects, numerical tables, drawings, pictures, charts, graphs, tables, diagrams, models and symbols in written and verbal form
Integrating with Aeronautics	NY	MA.8.8.R.1	Use physical objects, drawings, charts, tables, graphs, symbols, equations, or objects created using technology as representations
Integrating with Aeronautics	NY	MA.8.8.N.5	Estimate a percent of quantity, given an application
Integrating with Aeronautics	NY	MA.8.8.A.2	Write verbal expressions that match given mathematical expressions
Integrating with Aeronautics	NY	MA.8.8.A.3	Describe a situation involving relationships that matches a given graph
Integrating with Aeronautics	NY	MA.8.8.A.4	Create a graph given a description or an expression for a situation involving a linear or nonlinear relationship
Integrating with Aeronautics	NY	MA.8.8.A.15	Understand that numerical information can be represented in multiple ways: arithmetically, algebraically, and graphically
Integrating with Aeronautics	NY	MA.8.8.A.19	Interpret multiple representations using equation, table of values, and graph
Scientific Method(124-144)	NY	MA.8.8.RP.2	Use mathematical strategies to reach a conclusion